New

B R E V I O R A

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A NEW CAPROMYID RODENT FROM THE QUATERNARY OF HISPANIOLA

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During the early part of 1963, Mr. Robert Allen and I conducted field work on several Caribbean islands under the joint auspices of the Museum of Comparative Zoology at Harvard College and the Florida State Museum, supported in part by National Science Foundation grants GB 178 and G 16066. Our primary objective was the collection of vertebrates, both Recent and fossil. The period from 17 March through 4 April was spent in the Dominican Republic, during which time we received the cordial cooperation of Prof. Eugenio de Jesús Marcano F. and Ing. Emile de Boyrie Moya, Universidad Autonoma de Santo Domingo. The cave on the north flank of the Sierra de Neiba, from which *Antillogale marcanoi* Patterson 1962 was obtained in 1958, was revisited on 31 March through 2 April with the specific objective of securing supplementary material of this form. Although we had little success in this, meager evidence of two additional taxa was obtained: a single metatarsal of a tiny species of *Acratocnus* (Hooijer and Ray, in press), and a single cheek-tooth (MCZ 7675) of a large caviomorph rodent, described below. These specimens derive from the same thin reddish brown cave earth in the first chamber, from which the 1958 collections were obtained (see Patterson, 1962). This deposit contains a moderately rich accumulation of well-preserved remains (including skulls) of the common Hispaniolan caviomorphs, among which are interspersed a few fragments and isolated elements of other taxa, including *Solenodon*, *Nesophontes*, bats, and birds.

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Through the courtesy of the various curators in charge, I have had at my disposal the rich collections of fossil and Recent caviomorph rodents in the American Museum of Natural History, the Museum of Comparative Zoology (MCZ), and the U. S. National Museum (USNM). Comparison with relevant genera in these collections shows that the single tooth is that of a capromyid having its closest affinities with *Plagiodontia*,[2] but referable to none of the described species of that genus (Johnson, 1948). The peculiarities of the tooth are sufficiently striking to provide adequate basis for characterizing the species which it represents. It is probable that the species will require a new genus for its accommodation when it is better known, but it may be assigned with question to *Plagiodontia* pending discovery of additional material. The find provides yet another example of the novelties that reward exploration in Hispaniola, the least known, paleontologically, of the Greater Antilles.

RODENTIA

CAPROMYIDAE

PLAGIODONTIA ? ARAEUM[3] sp. nov.

Type: MCZ no. 7675, isolated left upper cheektooth, almost certainly the fourth (deciduous) premolar; damaged slightly along the posterolabial wall; the only known specimen of the species.

Horizon and locality: Late Pleistocene or Recent; first chamber of unnamed cave 2 kilometers SE of Rancho de La Guardia, Municipio de Hondo Valle, Provincia de San Rafael, República Dominicana. The coordinates of Rancho de La Guardia as given in Gazetteer no. 33 of the United States Board on Geographic Names are 18°43′N, 71°39′W.

Diagnosis: Differing from the upper cheekteeth of all other members of the genus *Plagiodontia* in its absolutely greater maximum diameter of occlusal surface and in its extreme anterolingual-posterolabial compression (to which the specific name alludes).

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[2] It might be suspected on the basis of size and general structure that the specimen is an upper cheektooth (as yet unknown) of *Quemisia*. However, the walls of each reëntrant fold in the upper cheekteeth of *Quemisia* would undoubtedly be tightly appressed as they are in the lower cheekteeth. Though the folds in MCZ 7675 are narrow, their walls are not appressed (Fig. 1).

[3] ἀραιόν, narrow.

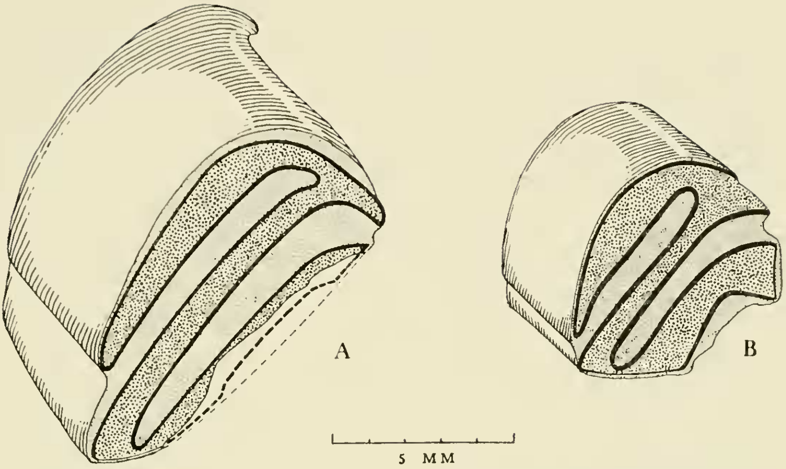

Figure 1. Occlusal views of (A) MCZ 7675, left DP^4 of *Plagiodontia araeum*, the holotype, and (B) MCZ 35314, right DP^4 (reversed) of *P. hylaeum*. Fine stippling represents cementum; coarse stippling, dentine. Drawn by Sue Hirschfeld under NSF GB 178.

Description: Anterior margin of tooth strongly convex as in DP^4 of *Plagiodontia*, not flattened as in M^1- M^3; incipient anterolabial fold absent, as in all *Plagiodontia*, excepting *P. aedium* (Johnson, 1948); reëntrant folds relatively long and narrow, parallel- sided; lingual reëntrant with slight posterad flexure at internal extremity, not observed in other *Plagiodontia;* labial reëntrant with concomitant flexure near its mouth; posterolabial concavity in enamel wall shallow in comparison to other species; longitudinal axis of tooth curved (convex anterolingually) as in upper cheekteeth of other *Plagiodontia*.

Measurements: All measurements of DP^4 are given in mm in the following table. Anterolingual-posterolabial diameter of occlusal surface in MCZ 7675 is estimated owing to damage along posterolabial wall of crown.

	P. aracum MCZ 7675	*P. ipnaeum* USNM 254376, right DP^4	*P. hylaeum* MCZ 35314, right DP^4
Maximum diameter of occlusal surface (A)	11.0	8.2	6.8
Anterolingual-posterolabial diameter of occlusal surface (B)	5.2	6.7	5.0
Ratio of B/A	.47	.82	.74
Maximum diameter of crown perpendicular to longitudinal axis (C)	10.7	7.6	6.8
Minimum diameter of crown perpendicular to longitudinal axis (D)	5.0	5.6	4.1
Ratio of D/C	.47	.74	.60
Height of crown perpendicular to occlusal plane	15.0	19.5	12.4

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